Dear Commissioners:

As a Wireless Internet Service Provider (WISP) in a rural county, I would like to add my comments. Currently I operate in the 2.4 GHz band using 802.11b. Increasing allowable power levels would improve my ability to offer service at a reasonable price. My service area is heavily wooded. With increased power, I could penetrate a few more trees, increase my cell size and provide service where it is not currently available. In the past, my company had a competitor who ran his AP's at 39db instead of the allowable 36db. When I bought that ISP and brought the AP's back to the allowable levels, we lost a number of customers who no longer had usable signal. If I could run my AP at 48db, which is currently the allowable level at the customer end, I could serve many more customers without building new towers. Raising the customer end level to 54db (1 watt amp plus 24dbi antenna) would benefit rural businesses who are willing to pay for an amp. In the future it may benefit residential customers as well. Currently there are no reasonably priced customer end radios and antennas that provide more than 48db. However, if the legal limits are raised, the manufacturers may follow suit.

Higher power does raise the possibility of interference. Interference normally occurs at the AP's which are above the tree line and can see each other. I have not seen interference issues caused my the lower and more directional antennas used at the customer end. Currently I have no competition from WISPs in any of my service areas. Recently, one of the townships in my county put out a request for quotes from WISPs wishing to be located on an emergency services radio tower on township property. My company was the only one to submit a proposal. In rural areas, there is often little likelihood of interference. Making sure broadband Internet service is available in rural areas is a bigger issue than creating interference.

In addition to increased power levels, more spectrum at lower frequencies is needed. The lower frequencies can provide signal that will penetrate trees. In certain heavily wooded areas such as lake shores, where distance between homes is not great, a smaller cell using a frequency with greater penetration would be a better choice.

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